



# Megasites

Presentation for the NACEPT—  
Superfund Subcommittee

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# Definition of a Megasite

## What is a Megasite?

Generally, a site is considered to be a megasite if the combined extramural, actual and planned, removal and remedial action costs incurred by Superfund or by PRPs are greater than \$50 million. The megasite designation may be applied to **any Federal or non-federal facility NPL or non-NPL site.**

## What is a Potential Megasite?

A site is defined as a potential megasite if the Region, using its best judgment, expects that the total costs of removal and remedial actions will exceed \$50 million, but the documentation of actual or expected costs (e.g., through decision or settlement documents or actual obligations) does not currently exist.



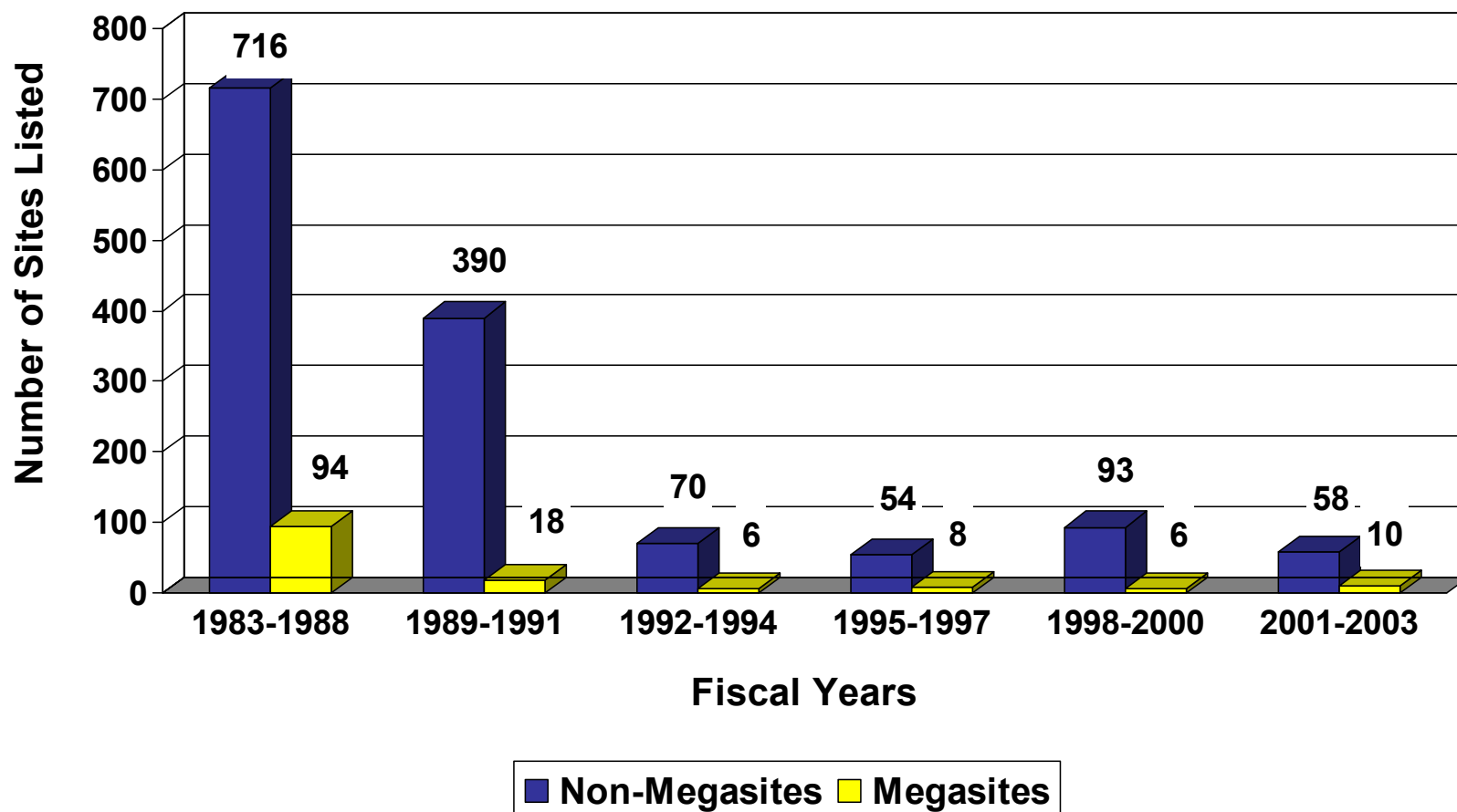
# Federal Facilities are not Counted as Megsites

## **Should the 171 federal facilities be counted as megasites?**

As part of the 1999 RFF study, EPA characterized non-federal facility NPL sites into megasite and non-megasite categories. The definition of megasite used in the RFF study was later codified in EPA guidance (SPIM) and expanded to include federal facilities. Because the nature of Federal facility sites (as well as the mechanisms for funding their cleanups) differs so greatly from most non-federal facility sites, EPA has not placed emphasis on tracking whether or not Federal facility sites should be classified as megasites. As a result, EPA's CERCLIS database currently identifies only three Federal facility sites as megasites. If the megasite definition was more rigorously applied to Federal facilities, numerous other sites would likely be classified as megasites.



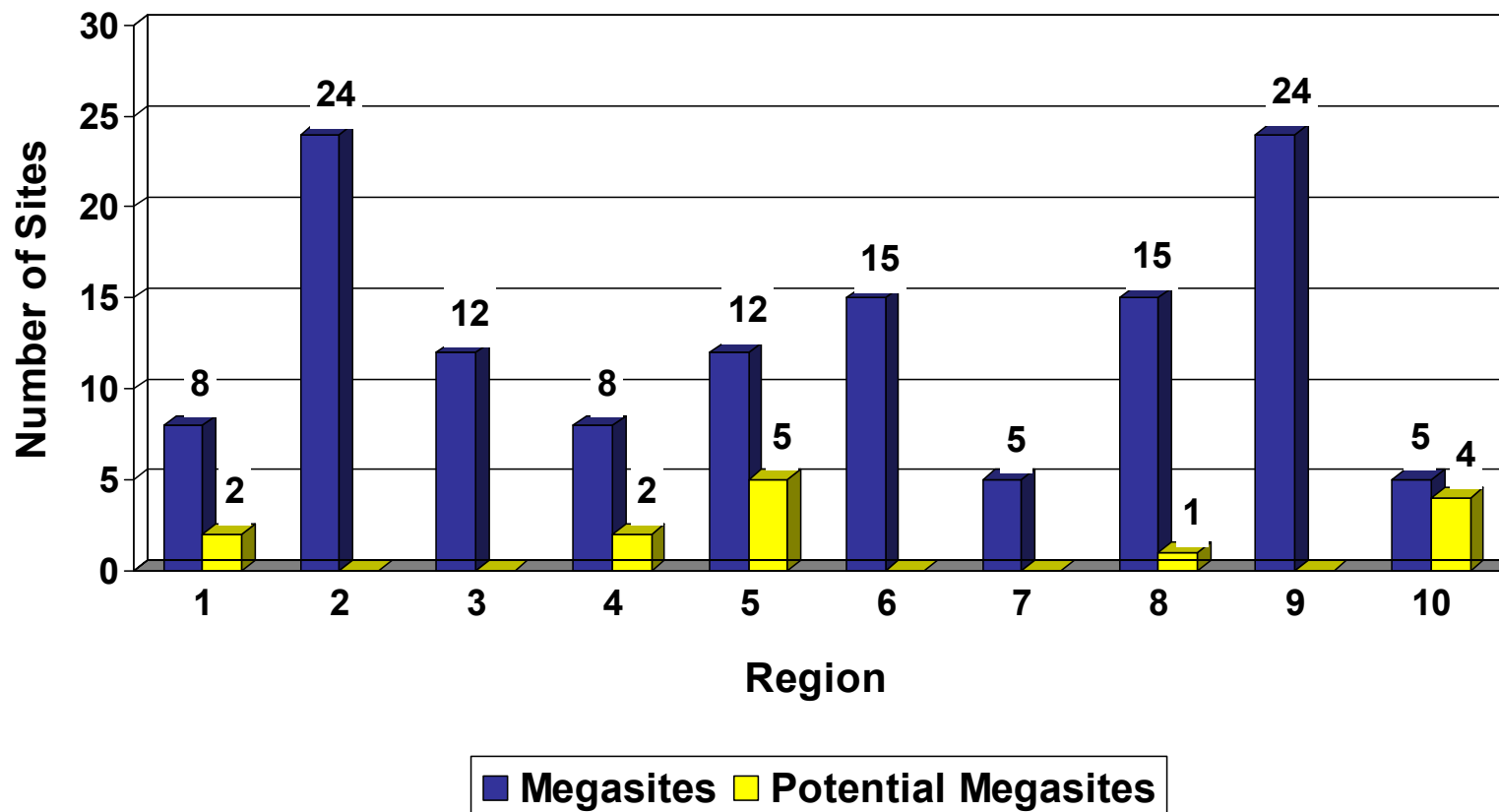
# Trends in NPL Listing





# Megasites by Region

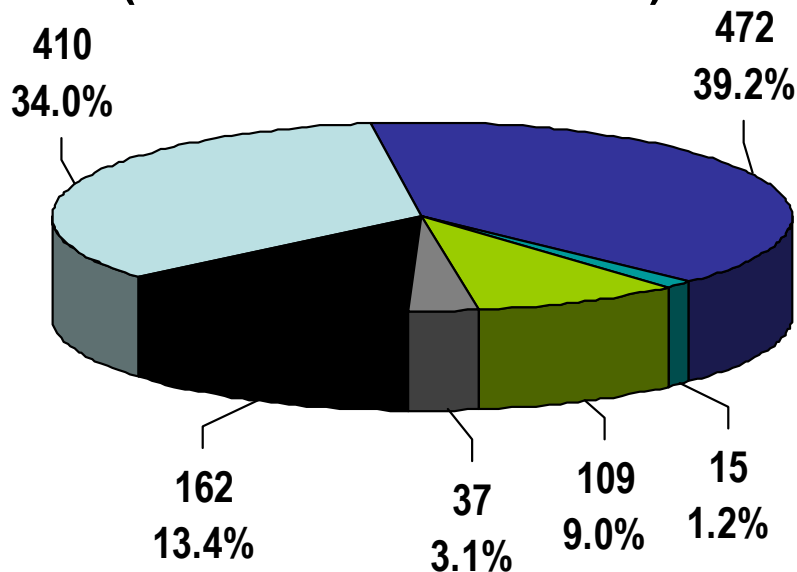
## 142 NPL Megasites and Potential Megasites



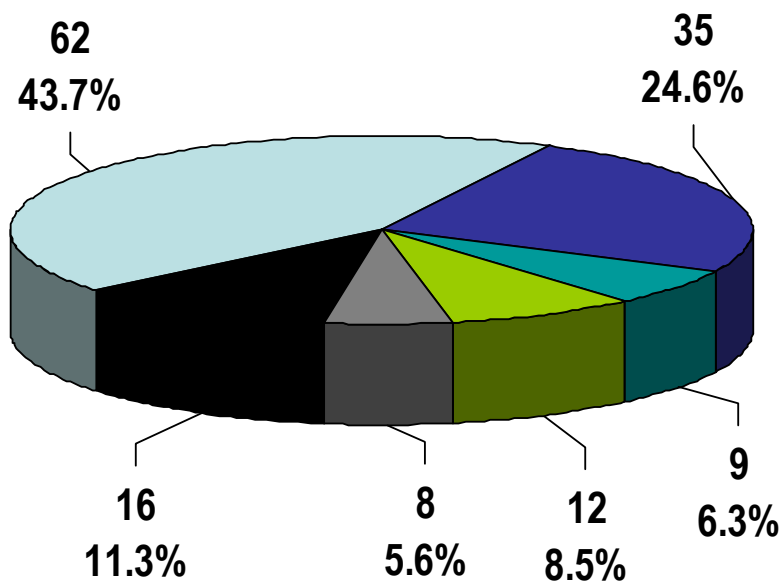


# Comparison of Megasites and Non-megasites by Site Type

**Non-Megasites  
(no Federal Facilities)**



**Megasites**



Manufacturing/Processing/Maintenance

Recycling

Waste Management

Multiple\*

Mining

Other\*\*

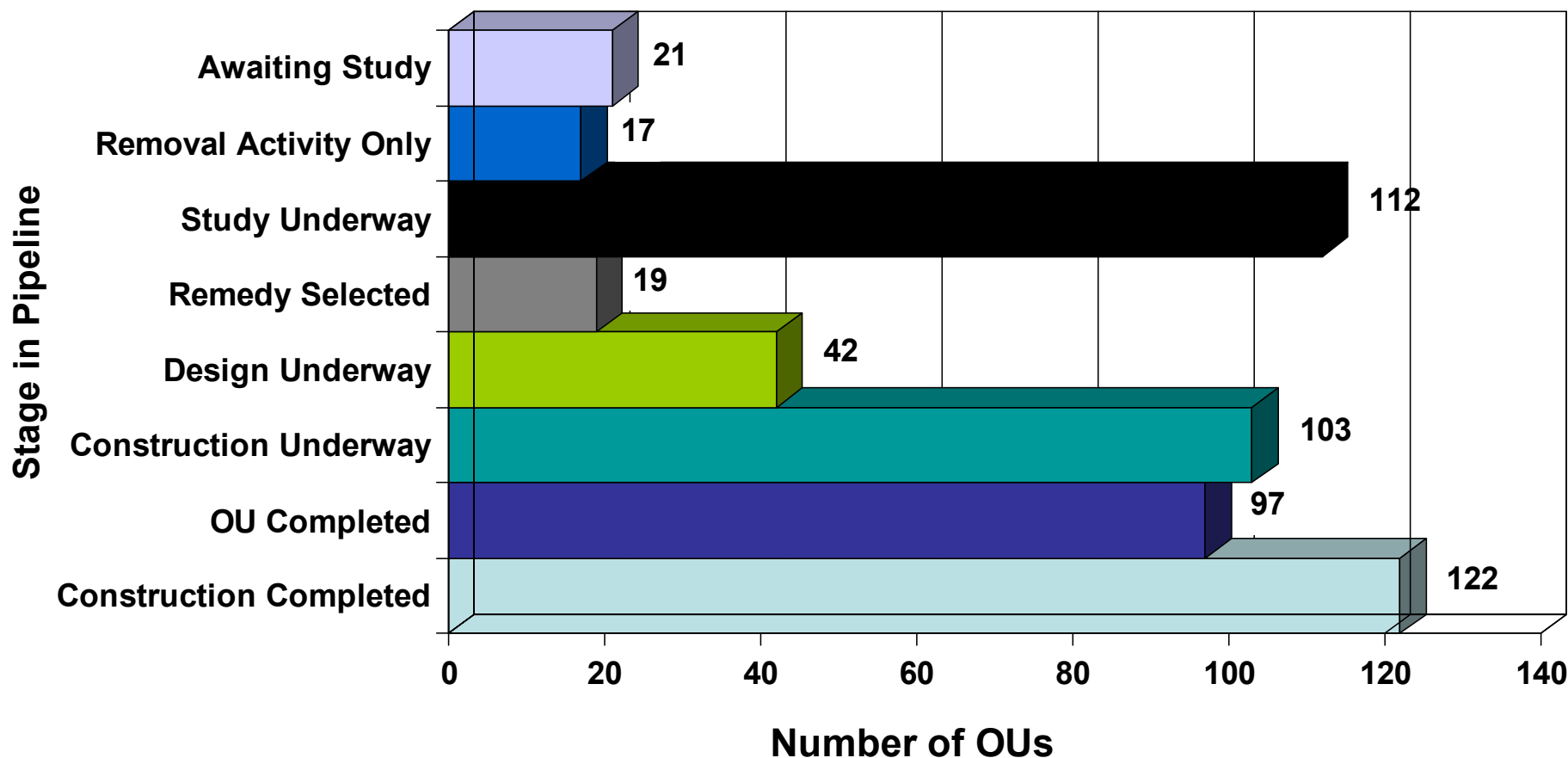
**\*Multiple:** Sites that fall in more than one site type

**\*\*Other:** Includes categories such as ground water plume; military; research, development, and testing facilities; transportation, etc.



# Where Megsites are in the Pipeline

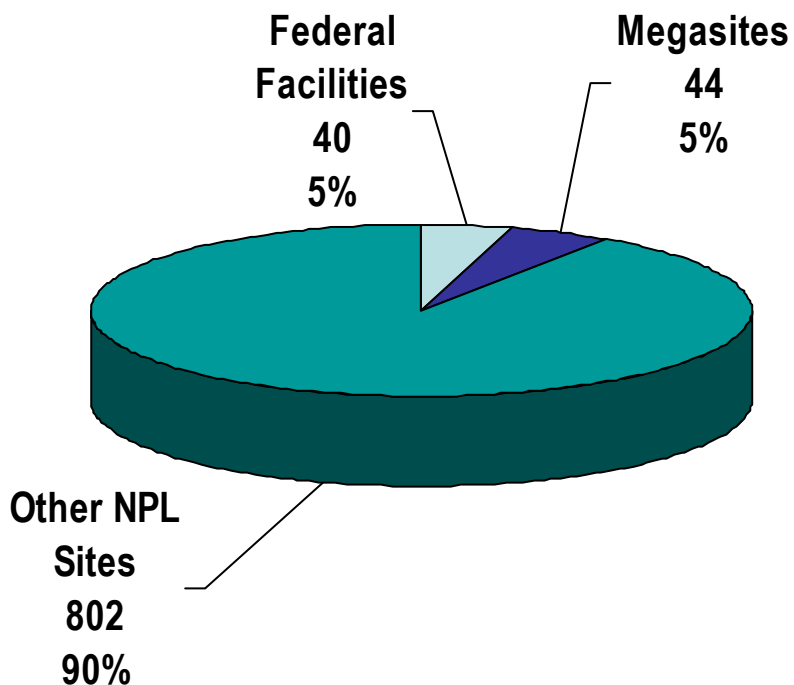
## Megasite OUs by Pipeline Stages



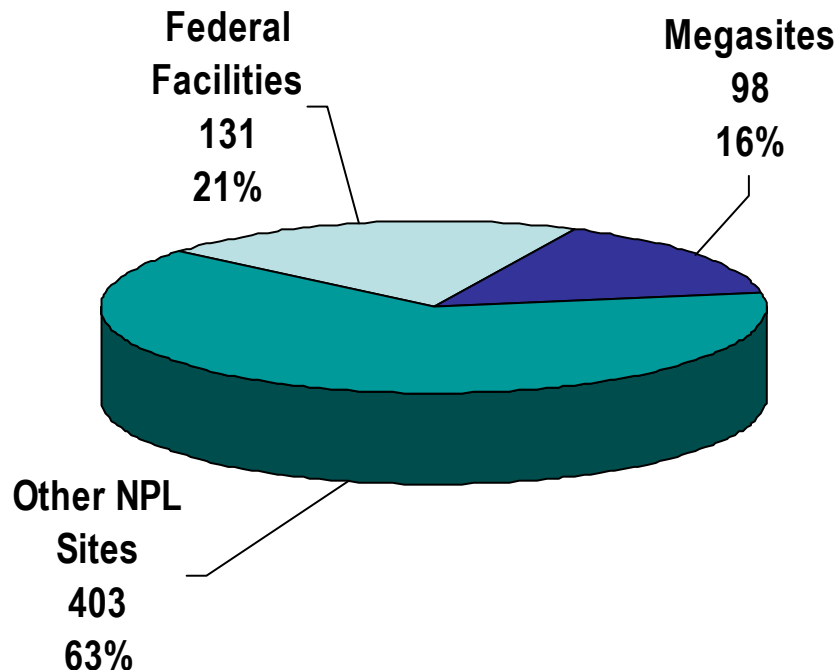


# Remaining NPL Sites are More Complex than CC Sites

## 886 Construction Complete Sites



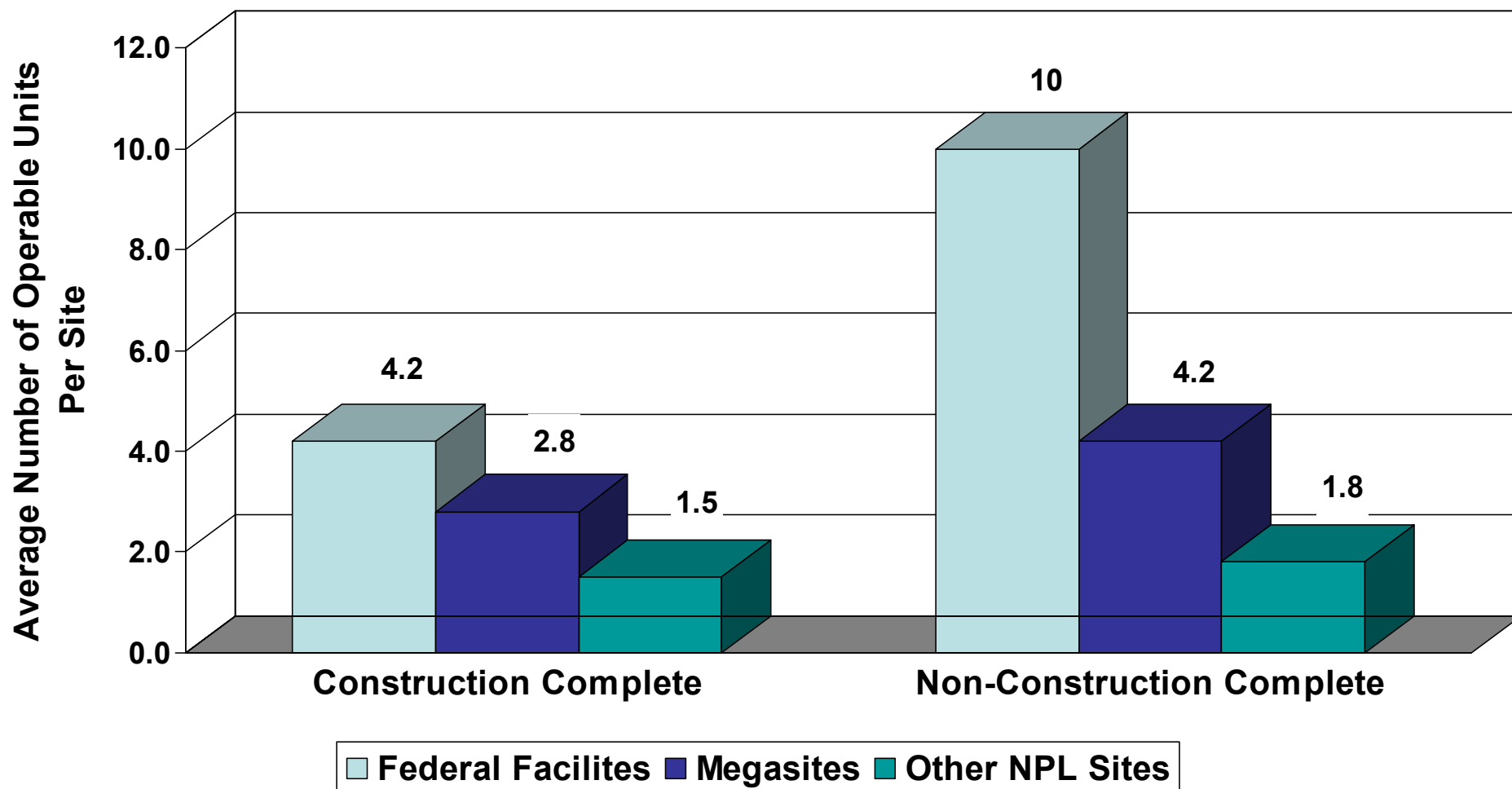
## 632 Non-construction Complete Sites





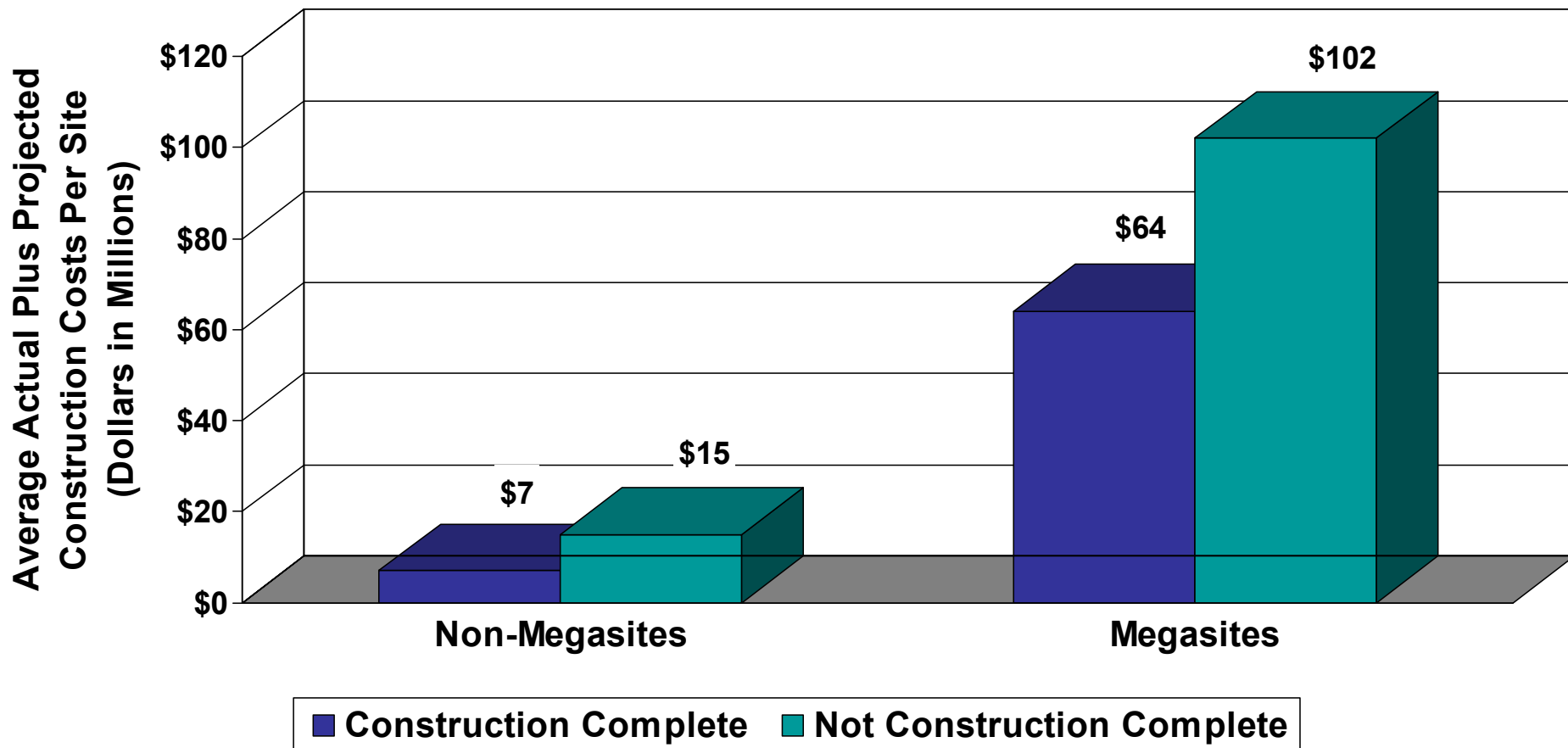


# Remaining NPL Sites Have More OUs than CC Sites





# Remaining Fund-lead Sites are More Costly than CC Sites

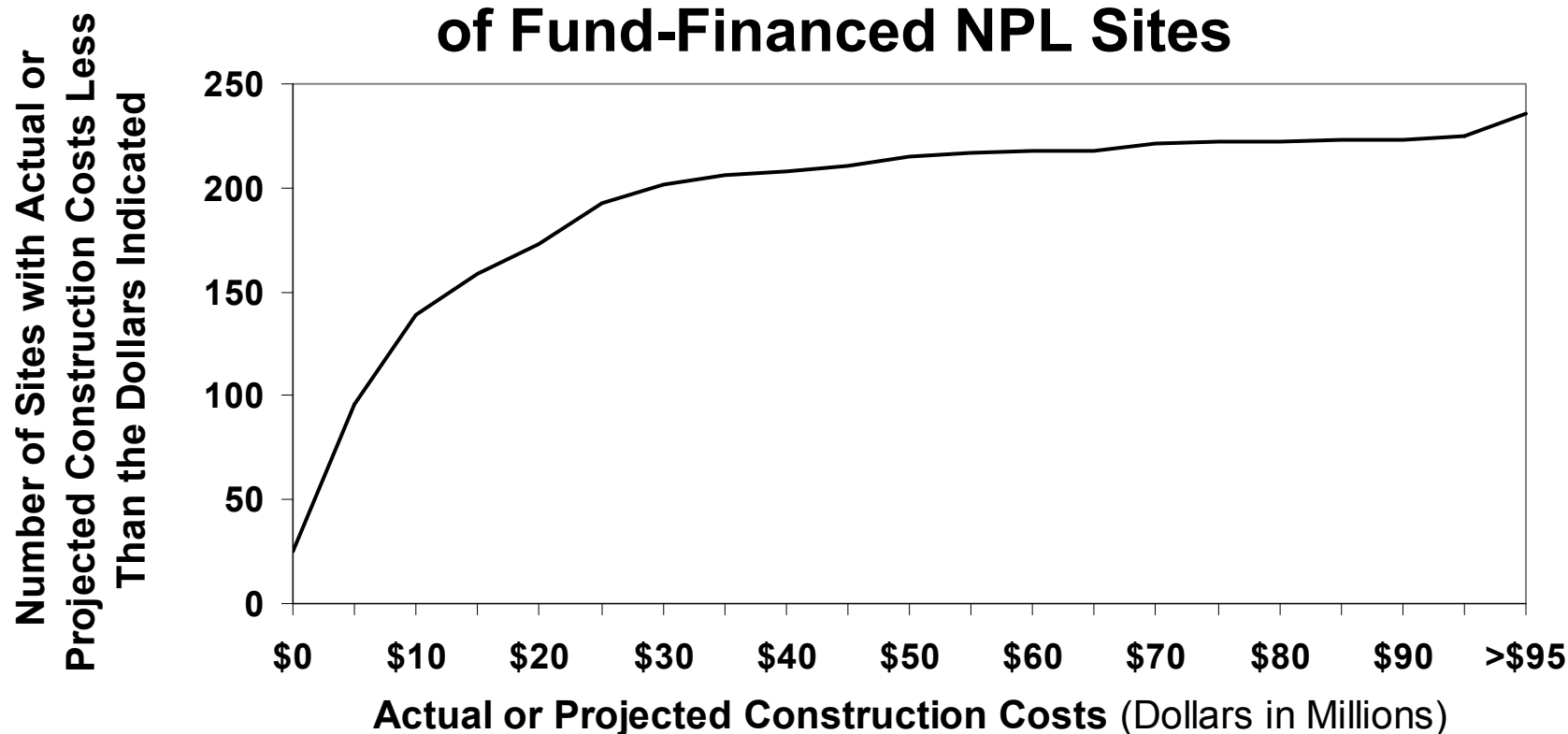


End of year IFMS and CERCLIS obligation data;  
costs not adjusted for inflation



# Distribution of Fund-financed Costs

## Cumulative Frequency Distribution of Costs of Fund-Financed NPL Sites



A "fund-financed site" is defined as having only fund-financed remedial activity and all remedial activity underway or complete.

Construction costs include extramural remedial and removal action actual and projected obligations, including PRP settlement and State cost share resources.



# Non-NPL Potential Megsites

Region	Site Name	Federal Facility	NPL Status
1	GE – HOUSATONIC RIVER	No	Proposed
2	ALOCAL AGGREGATION SITE	No	Non-NPL
2	REYNOLDS METALS CO	No	Non-NPL
4	ANNISTON PCB SITE (MONSANTO CO)	No	Non-NPL
4	BROWN'S DUMP	No	Non-NPL
4	COPPER BASIN MINING DISTRICT	No	Non-NPL
4	JACKSONVILL ASH SITE	No	Non-NPL
5	FOX RIVER NRDA/PCB RELEASES	No	Proposed
5	SAUGET AREA 1	No	Proposed
6	CALCASIEU ESTUARY	No	Non-NPL
6	MOLYCORP, INC.	No	Proposed
8	KENNECOTT (NORTH ZONE)	No	Proposed
8	KENNECOTT (SOUTH ZONE)	No	Proposed



# Hazardous Sites on States' Radar Screens

**From the Environmental Law Institute Study, “An Analysis of State Superfund Programs: 50-State Study, 2001 Update”**

1. States have identified ~ 63,000 known and suspected sites.
2. States have identified ~ 23,000 sites as needing attention.



# Agency Controls on Reallocating Resources

**There are two “controls” on the Agency's ability to reallocate resources once a congressional appropriation is enacted.**

- The appropriations act defines funding levels for the OIG, ORD (called the S&T Transfer), and other federal agencies. Changing these amounts would require an amendment to the act.
- The House and Senate Appropriations Committee Reports establish funding levels for Response, Enforcement, and Management and Support. These are called function caps. Reallocation of resources between functions at a level greater than \$500,000 requires the approval of the Congressional Appropriations Committees.



# Delaying Construction Increases Costs

## New Bedford Harbor

### Given:

- Volume 880,000 cubic yards
- 2004 unit cost of dredging is \$300/cubic yard

### Assumption:

- Inflation at 3% per year to 2004 unit cost

Annual Funding	Years to Complete	Cost to Complete
<b>\$30 M</b>	<b>11</b>	<b>\$330 M</b>
<b>\$20 M</b>	<b>18</b>	<b>\$360 M</b>
<b>\$15 M</b>	<b>26</b>	<b>\$395 M</b>



# What EPA is Doing Now to Address Megsites

- Dividing sites into multiple OUs; conducting human health risks first.
- Reviewing remedies and annual progress at these sites with Agency panel.
- Providing site managers advice on the largest or most complex contaminated sediment sites where a remedy has not yet been selected based on the new 11 Sediment Risk Management Principles. (EPA's Contaminated Sediments Technical Advisory Group)





# What EPA is Doing Now to Address Megsites (continued)

- Developing a strategy for addressing hard rock mining sites. This strategy, while not focused on mega-sites as such (by the >\$50M), serves as a framework for addressing these types of sites because of the physical size and complexity, the extent of contamination, the potential effects on whole watersheds, the array of interested parties, and the overlapping responsibilities of Federal and State agencies. (EPA's Abandoned Mine Lands Team)
- Designated eight demonstration pilot projects to coordinate the planning and implementation of urban river cleanup and restoration to address water quality issues, economic revitalization, and the public use and enjoyment of urban rivers. (Urban Rivers Restoration Initiative)